US EPA RECORDS CENTER REGION 5





Facility No.: 1198010003 Public Notice: 97013

Date: December 31, 1997

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NOTICE OF CLOSURE CLOSURE NO. C-785

A plan to close the four hazardous waste containment areas located at Chemetco, Inc., has been submitted to the Illinois Environmental Protection Agency (Illinois EPA) pursuant to Subpart G of 35 Ill. Adm. Code 725. The Chemetco, Inc. facility is located at Route 3, Hartford, Illinois and is a producer of anode copper, cathode copper, crude lead-tin solder, zinc oxide and slag. The facility will remain in operation during and following closure of the hazardous waste management units described in this notice.

At this time the Illinois EPA is also requesting that the facility provide information concerning any prior release of hazardous waste constituents from any solid waste management facility on the site.

Interested persons are invited to submit written comments on the plan or request modifications of the plan or provide information on the release, at any time, of hazardous waste constituents from the facility, within 30 days of the first publication date of this notice. Written comments must be addressed to the Illinois EPA, Bureau of Land, Permit Section #33, Attn: Kevin Lesko, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, telephone number 217/524-3300.

The site must be closed in accordance with the standards set forth in the Environmental Protection Act, Ill. Rev. Stat., Ch. 111 ½, Pars. 1001 et seq., and regulations adopted thereunder.

The proposed closure plan, closure performance requirements, and other documents are available for inspection and may be copied at the Illinois EPA's Springfield headquarters.

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An appointment to inspect or copy the proposed closure plan must be made in advance by contacting the Bureau of Land, Freedom of Information Act (FOIA) coordinator at 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-6760. Please refer to the closure number under the heading at the top of this advertisement when contacting the FOIA coordinator.

In response to requests or at the discretion of the Illinois EPA, a public hearing may be held to clarify one or more issues concerning the closure plan. Public notice will be issued 30 days before any public hearing.

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Mary A. Gade, Director 217/524-3300 2200 Churchill Road, Springfield, IL 62794-9276

January 29, 1993

Chemetco, Incorporated Attn: David Hoff, President P.O. Box 187 Alton, Illinois 62002

'Re: LPC #1198010003 -- Madison County Chemetco, Incorporated ILD048843809 Log No. C-334-M-7 Received: November 4, 1992 RCRA - Closure

Dear Mr. Hoff: .

The closure plan modification request dated October 30, 1992, submitted by yourself and prepared by CSD Environmental Services, has been reviewed by the Agency. The referenced submittal proposed reductions in the annual 35 IAC 724 Appendix I monitoring requirements of Condition 5 of the Corrective Action Program of the April 19, 1991 approval letter. The proposed modifications are approved for purposes of closure and post-closure monitoring under 35 IAC 725. Please note, however, that full Appendix I analysis will be required for 35 IAC 724 post-closure permitting and clean closure demonstration under 35 IAL /03.160.

Your final closure and post-closure plan to close three hazardous waste surface impoundments (D83), one hazardous waste pile (\$03), one hazardous waste tank (TO1), and one hazardous waste filter press (TO4) at the above referenced facility is hereby approved subject to the following cordifiums and modifications. Included below are the conditions and modifications of the previous closure plan approval letter with the following changes: (1) Conditions 1 and 3 have been deleted because they have been satisfied, (2) Condition 5 of the Corrective Action Program of the previous tetter has been changed to reflect this approval, and (3) a new condition has been added to indicate that this letter supersedes the previous approval ictter.

- this letter supersedes the provious closure plan approval letter dated April 19, 1991.
- use of the ANOVA does not apply since the Agency has established the clearup objectives. However, a trend analysis using straight line linear regression can be performed on all point of compliance wells to determine increases or decreases in contamination. Additionally any parameter exceeding the approved cleanup objective in the downgradient wells would require further assessment beyond the point.

EPA Exhibit Number.

- 3. TOC and TOX shall be added to the quarterly parameter list for all wells. TOC and TOX are required to measure for any increases in organics.
- 4. Wells 18, 32 and 33 shall be added to the upper regional aquifer monitoring program. Well 18 is to be added to monitor for any downgradient contaminants from the SID system. Wells 32 and 33 are added to determine contaminant concentrations near the regulated units.

Corrective Action Program

Chemetoo shall implement the following corrective action program which controls the flow of groundwater in the perched and upper regional aquifers beneath the facility. This corrective action must ensure that concentrations of contaminants above Agency established cleanup objectives do not migrate beyond the point of compliance as defined in the approved January, 1991 Closure Plan. (This point of compliance is for interim status closure/post-closure activities and does not meet the definition of point of compliance listed in 724.195.) In order to ensure this, the corrective action shall consist of the following:

- Recording the rate at which water is removed from the SIDS System on a daily basis.
- ?. Recording the rate at which water is removed from each of the 4 pumping wells in the upper regional aquifer on a daily basis.
- 3. Maintaining an inward gradient at the north property boundary line to ensure that concentrations of contaminants above Agency established cleanup objectives do not migrate beyond the point of compliance. In order to maintain this gradient, the 4 pumping wells shall pump a combined rate of at least 165 gpm. This number was derived from Chemetco's uroundwater modeling described in the approved closure plan. The Agency has not reviewed the model. Therefore, it will be accepted at face value and if the piezometers required in 4 below indicate an inward gradient does not exist additional corrective action will be required by 10 below.
- Apriodically monitoring the piezometric head at various locations in the regional aquifer. This monitoring is necessary to demonstrate that groundwater flow is properly controlled. The following piezometers shall be monitored quarterly at a minimum for groundwater surface elevations:

Upger Regional Aquifer					<u>fer</u>	<u>Lower Regional Aquifer</u>
	27 3A				33	36 43 39 46
	34	_		••		

5. In order to demonstrate the effectiveness of the corrective action, groundwater quality in the perched sand and regional aquifer shall be monitored in all wells on a quarterly basis for the following parameters:

Lead
Cadmium
Zinc
Arsenic
Chromium
Copper
Tin
pll
Specific Conductance
TOC
TOX

The groundwater monitoring results shall be submitted on the enclosed Agency Chemical Analysis forms according to the following schedule.

Sampling Event of Calendar Year	Samples to be Collected During the Months of	Results Submitted to the Agency by the Following	
First Quarter	January - February	April 15	
Second Quarter	April - May	July 15	
Third Quarter	July - August	October 15	
Fourth Quarter	October - November	January 15	

Annually samples are to be taken during the fourth quarter of the year from wells 31A, 28, 34, 44 and 47. These samples must be analyzed for 35 IAC 724, Appendix I metals and semi-volatiles. The analytical results shall be evaluated and submitted to the Agency on January 15 of every year.

- 6. Chemetoo shall maintain all equipment associated with the withdrawal and treatment (if necessary) of water withdrawn from the perched sand and upper regional aquifer. Equipment failures must be reported in writing to the Permit Section, Division of Land Pollution Control within seven days of that failure with a description of actions taken to ensure compliance with the requirements of the corrective action program.
- 7. Chemetoo shall determine the groundwater flow rate and direction in the perched and regional aquifers on a quarterly basis. Water table and piezometric maps must be developed using this data. The maps must show (1) the location of the wells utilized to develop the maps and (2) the boundaries of the facility. These maps shall be submitted with the quarterly monitoring results.

- 8. Chemetoo shall submit a written report to the Agency annually, which discusses the effectiveness of the corrective action program. The report must address (1) the ability of the program to control groundwater control as described above and (2) the statistically significant increase or decrease in the quality of groundwater beneath the facility during operation of the corrective action program. The report must be submitted with the Annual Report required under 35 Ill. Adm. Code Part 725.194 due March 1 of every year.
- Chemetco shall submit all information to the Agency in a form which can be easily reviewed. All submittals must contain tables of data, drawings and text (as necessary) to accurately describe the information contained in the submittal.
- 10. In the event that groundwater flow is not adequately controlled, as determined by groundwater monitoring, Chemetco shall:
 - a. Notify the Agency in writing within 7 days of the date this determination is made;
 - b. Take actions as necessary to regain control of groundwater flow as required above;
 - c. Submit a written report to the Agency within 30 days describing the actions taken to regain control of groundwater flow. In addition, the report must contain information which demonstrates that groundwater flow is being adequately controlled; and
 - d. Submit a closure plan modification to the Agency within 60 days describing any changes which must be made to the corrective action program to ensure that the groundwater flow is adequately controlled.
- 11. Closure activities for the Zinc Oxide Bunker/Pile (SO3), slurry tank (TO1) and filter press (TO4) must be completed by November 1, 1994. Closure activities for the Cooling Water Canal (D83), Zinc Oxide Lagoons (D83) and the floor Wash Impoundment (D83) must be completed by within 180 days after the facility is closed.

When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure activities are completed, or for the SO3, TO1, and TO4 units by January 1, 1995.

The attached closure certification form must be used. Signatures must meet the requirements of 35 III. Adm. Code 701.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the units approved for closure herein until the Agency approves the facility's closure certification.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste and waste residue removed. The term waste includes wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- Ite waste manifest numbers.
- c. Copies of the waste manifests.
- A description of the sampling and analytical methods used.
- A chronological summary of closure activities and the cost involved.
- g. Color photo documentation of closure. Document conditions before, during and after closure.
- h. Test performed, methods and results.
- Survey plat showing location of disposal units (required by 35 III. Adm. Code, Subtitle G. Section 725.216 and 725.219 as amended March 24, 1987). (For D83 Units Only)

j. A copy of the document (notation in deed or other document examined during title searches) in which the notification required under Section 725.219(b) as amended March 24, 1987. (For D83 Units Only)

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency Division of Land Pollution Control -- #33 Permit Section 2200 Churchill Road Post Office Box 19276 Springfield, Illinois 62794-9276

- 12. No later than sixty (60) days after the completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator shall submit to the Agency, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan per 35 IAC, Section 725.220 (as amended February 5, 1987).
- 13. Owners and operators of waste management units which received wastes after July 26, 1982 or that certified closure according to 35 IAC 725.215 after January 26, 1983 are required to submit an application for a Post-Closure Permit meeting the requirements of 35 IAC, Part 724 upon request from the IEPA unless it is demonstrated that closure by removal has been achieved. (35 IAC Section 703.121(b)).
- 14. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 15. The approval of this closure plan does not resolve this facility's violations of 35 Ill. Adm. Code, 725, Subpart H (Financial Requirements). These violations will not be resolved (and the facility will remain out of compliance) until adequate financial assurance is established for the Agency approves the certification of closure.
- 16. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual

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field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

- 17. All samples shall be analyzed individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the latest edition of SW-846 and Attachment 7 to this Agency's closure plan instruction package. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the third edition of SW-846. For inorganic parameters, the detection limit must be at least as low as the RCRA Groundwater Detection Limits, as referenced in SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15.
 - 18. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated material on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated material in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
 - 19. Please he advised that the requirements of the Responsible Party Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).
- 20. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Agency by March 1 of the following year for wastes treated and left on site or shipped off-site for storage, treatment and/or disposal during any calendar year. Additional information and appropriate report forms may be obtained from the Agency by contacting:

Administrative Compliance Unit Division of Land Pollution Control Illinois Environmental Protection Agency P.O. Box 19276 Springfield, Illinois 62794-9276 Should you have any questions regarding this matter, please contact Mark L. Crites or Terri Blake Myers at 217/524-3300.

Very truly yours,

Lawrence W. Eastep, P.E., Manager Permit Section

Division of Land Pollution Control

Bureau of Land

LWF:MLC:sf/sp/56Y.1-8

Attachment

cc: USEPA Region V -- George Hamper

Madison County Board Office

bcc: Division File

Collinsville Region

Kenn Liss Jerry Kuhn Mark Crites

Terri Blake Myers

ATTACHMENT 1

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-334-M-7

The hazardous waste management SO3, TO1 and TO4 units at the facility described in this document have been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number	Facility Name
Signature of Owner/Operator Date	Name and Title
Signature of Registered P.E. Date	Name of Registered P.E. and Illinois Registration Number
Milling Address of P.E.:	
MI (· sf/sp/56Y,9	

ATTACHMENT 2

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-334-M-7

The three hazardous waste management D83 units at the facility described in this document have been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Owner/Operator hereby certifies that he has recorded the notation specified in 35 III. Adm. Code, Section 725.219(b)(1) as amended March 24, 1987.

USEPA ID Number		Facility Name
Signature of Owner/Operator	Date	Name and Title
Signature of Registered P.E.	Date	Name of Registered P.E. and Illinois Registration Number
Mailing Address of P.E.:		
MLC:sf/sp/56Y,10		

ATTACHMENT 3

Laboratory Determination of Permeability of Fine Grained Soils

Procedure for Liners:

Laboratory determination of permeability of fine grained soils shall be performed using the modified triaxial apparatus technique, including back pressure saturation, to determine the constant head, saturated permeability of an "undisturbed" soil sample. Disturbance of the soil sample shall be minimized both before and during the determination in order to approximate actual field conditions. The determination shall continue until permeant liquid inflow and outflow are equal and until a "steady-state" permeability value is obtained. At a minimum, the determination shall continue until at least one-quarter (1/4) pore volumes of permeant liquid have passed through one soil sample or the volume of permeant flowing out of the sample in a minimum period of six hours is equal to the volume input in the same period, whichever is longer. The permeant liquid shall be (1) either tap water or 0.005 N CaSO4 solution or leachate from the site or another site with similar physical and chemical characteristics for liners. In any case, distilled water shall not be used. The effective stress (confining cell pressure minus the average of the headwater and trailwater pressures) applied to the soil sample in the triaxial apparatus shall be set as close as possible to the expected in situ-stress conditions to prevent excessive consolidation of the soil sample. Hydraulic gradients (driving force pressure expressed in centimeters of water pressure divided by the length of sample in centimeters) used for a determination shall be kept below 30. Sample size must have a minimum ratio of diameter versus height of 1 to 1 with a minimum diameter of 2.75 inches. Laboratory permeability determination results shall include a detailed description of both the sample collection and preparation techniques and the details (cell pressure, headwater pressure, tailwater pressure, driving pressure, gradient, sample size, permeant liquid, time, etc.) of the determination procedures.

MLC: < f/sp/55Y, 11

STATE OF ILLINOIS)
COUNTY OF SANGAMON)

PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached AMENDED RESPONSE OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY upon the persons to whom it is directed, by placing copies in an envelope addressed to:

Dorothy M. Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph St., Suite 11-500 Chicago, Illinois 60601

Phillip A. Montalvo, Esq. Illinois Department of Natural Resources 524 S. Second Street, 4th Floor Springfield, Illinois 62701

Michael Wallace Hearing Officer Illinois Pollution Control Board 600 S. Second Street Springfield, Illinois 62704

George M. von Stamwitz Richard L. Waters Armstrong, Teasdale, Schlafly & Davis One Metropolitan Square **Suite 2600** St. Louis, Missouri

and delivering it to a messenger or mailing it from Springfield, Illinois on January 27. 1997 with sufficient postage first class mail.

Brunda Boehner

SUBSCRIBED AND SWORN TO BEFORE ME

this 27th day of January, 1997

Vicky Con Lanken

Notary Public



CERTIFIED MAIL RETURN RECEIPT REQUESTED

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Re: Molosure Plan Review Ufacility Name: Capperaco TÜSEPA ID #:

048863639

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LAPTFORD, IL, SHOAR

SOLID WASTE BRANCH U.S. EPA. REGION V

Dear sma,

As you are aware, we are currently evaluating the request for closure of your facility as referenced above, and which is regulated under the Resource Conservation and Recovery Act (RCRA).

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to amend RCRA. Under Section 206 and Section 233 (copies enclosed) of the Amendments, all facilities "seeking a permit" (taken to mean interim status facilities) must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the Please note that both hazardous and non-hazardous wastes can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that any necessary corrective actions either have been taken, or will be taken, pursuant to a decision on your closure plan. An important part of our determination includes your willingness (or unwillingness) to complete the enclosed certification form. Please read it carefully, complete it, and either sign and return it, or return it to us unsigned with a cover letter of explanation, within 30 days of the date of this letter. Public notice of your request for closure approval, and this request, will be in a newspaper of general circulation in the area of the facility.

Please call PROMIT SECTION at 217/782-6762 if you have any questions, or wish to discuss this matter further.

Very truly yours,

Kawrence W. Eastep, P.E., Manager

Permit Section

Division of Land Pollution Control

LWE:CA:tk:5/2/9

Enclosures

cc: David A. Stringham, USEPA - Region V Permit Section

Division File

